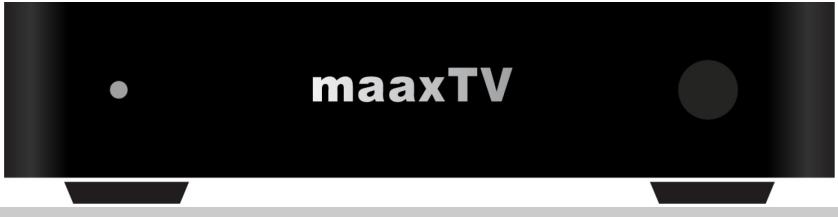
maaxTV

maaxTV LN4000

User's Guide

How to use this LN4000 set-top box



IMPORTANT SAFETY INSTRUCTIONS

- Read and follow these instructions.
- Heed all warnings.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- In ambient temperatures of no more than 27° C (80° F), the normal operating temperature for LN4000 is between 50° C (122° F) to 60° C (140° F).

IMPORTANT SAFETY CONSIDERATIONS

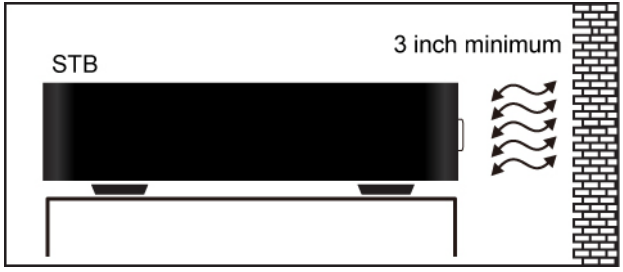
The LN4000 set-top box requires careful handling to avoid potential damage to its internal parts. Be sure to follow these requirements during transportation and installation. The plug is the main disconnect device. It shall remain readily accessible and operable. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

During Transportation to the Subscriber Home

Transport the LN4000 in its shipping box or an equally padded container. Do not expose it to rain or moisture.

During Installation

- Do not place LN4000 in an enclosed area where the cooling vents are blocked or impede the flow of air through the ventilation openings.



- Install so that its position does not interfere with its proper ventilation. For example, do not place LN4000 on a bed, sofa, rug, or similar surface that could block the ventilation openings.

CAUTION!

Do not place anything on top of your LN4000 set-top box, especially other home entertainment components. Be sure to provide adequate ventilation to prevent overheating.

- Install LN4000 on a hard flat surface not prone to vibration or impact and not on top of another electronic device
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Installation of LN4000 near consumer electronics devices, such as stereo receiver/amplifiers and televisions, is permitted as long as the air surrounding LN4000 does not exceed 40° C (104° F).
- Do not install LN4000 in an area where condensation occurs.
- To prevent the temporary loss of guide data and cause a temporarily non-responding LN4000, do not plug the AC power cord into a switched power outlet.

FCC COMPLIANCE

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and set-top box.
- Connect the equipment into an outlet on a circuit different from that to which the set-top box is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by maaxTV for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must be co-located for operating in conjunction with any other antenna or transmitter.

CARING FOR THE ENVIRONMENT BY RECYCLING

When you see this symbol on a maaxTV product, do not dispose of the product with residential or commercial waste.

Recycling your maaxTV Equipment

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact your local authorities for information about practices established for your region.

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1. INTRODUCTION

We congratulate you on receiving thisLN4000 Series High-Definition All-Digital set-top box, one of the most compact and advanced interactive digital IPTV set-top boxes available today. maaxTV has combined the extraordinary features of IPTV — the interactive programming guides, almost endless programming options, Video on Demand (VOD), the incredible sound and picture quality of High-Definition TV (HDTV), and so much more. This set-top box comes with an "Entertainment Package" that enables a direct digital connection to consumer audio and video devices through HDMI™ interfaces. The HDMI interface and provides 7.1 channels and beyond enhanced-quality audio and video. It comes with a T-connector just in case your TV set doesn't support High-Definition TV. It's also equipped with a built-in WiFi module (optional), so that you can seamlessly connect it to your home network and/or Internet without the need of a network cable (although it is included in the package). This User's Guide introduces you to the basic features, outlines important safeguards, and provides several options for integrating this component into your current home entertainment system. Please take a few minutes to read through this User's Guide to help you maximize the most of your home entertainment experience: the configuration diagrams, on-screen menu description and a troubleshooting section. To determine which features of digital IPTV service are provided in your service area, please check with your IPTV operator. They will be happy to provide instructions for some of these optional services.

Features

- Fast 1620 DMIPS MIPS Architecture CPU
- 512 MB of 1600 MHz DDR3
- 256 MB NAND Flash
- USB support for mass storage playback, keyboard, and mouse
- Video format support: MPEG-1 MPEG-2 MP@HL, MPEG-4.2 ASP, MPEG 4.10 AVC (H.264 & H.263), MP & HP TO LEVEL 4.1, VC-1 AP@L3, WMV9, SD & HD, DIVX, AVI, AVS, XVID.
- Audio format support: MPEG-1 LAYER 1,2. MP3, WMA, WMA PRO, AAC LC, AA LC+SBR L2, AAC+L2, AAC+L4, AAC 5.1.
- Support many display modes: PAL, NTSC, 720p, 1080i, Full HD 1080p.*
- Support aspect ratios: 4:3 and 16:9 letterbox, zoom, and full screen mode.
- HDMI 1.4, T-connector (for Component & Composite), Digital Audio (S/PDIF), Audio L/R, Ethernet, USB.
- 1080p 24/30 video decode & output support
- Support optional 802.11n 150 Mb/s WiFi

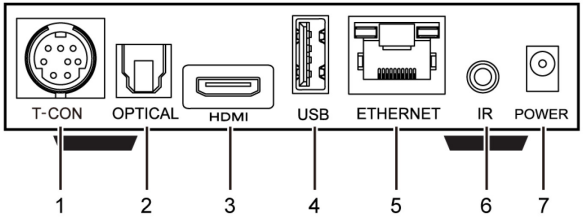
**Some televisions may not support all video formats listed above*

Front Panel

** Availability of certain features is dependent upon application support.*

1	Power and Activity LED
2	IR Receiver

Rear Panel



** Availability of certain features is dependent upon application support.*

1	T-CONNECTOR
2	OPTICAL SPDIF
3	HDMI 1.4
4	USB 2.0
5	ETHERNET/RJ-45
6	IR Dongle
7	POWER

2. OPERATION

Turning Power On and Off

Plug in the supplied power adapter to the electrical outlet and to the back of LN4000 set-top box or use a remote control to turn it on or off (standby). When using the remote control, pressing the POWER button once will put LN4000 set-top box on a standby mode while pressing and holding the same button for approximately 3 seconds will turn it off.

Changing Channels

You can change channels in three ways:

- Press CHANNEL + or – on the remote control to step through the channel selection.
- Enter the number of the channel you wish to view using the number keys on the remote control.
- Select the channel in the Interactive Program Guide.

Adjusting the Volume

Press VOLUME + or – on the remote control to adjust the volume. When you adjust the volume, the volume scale is displayed on the screen. Press MUTE on the remote control to toggle the sound on and off. For best audio quality when using the analog L/R (var.) volume controlled audio outputs, use the remote control to set the LN4000 set-top to approximately three quarters of the maximum volume level and then adjust the audio levels on external devices such as your TV or A/V receiver. When using the analog L/R (fixed) audio outputs or any of the digital audio outputs (HDMI, optical or coaxial digital audio) adjust the audio levels on your external device such as your TV or A/V receiver. You may

also be able to program your remote to control the volume of your TV or A/V receiver directly (refer to the remote control instruction manual).

Interactive Programming Guide

The Interactive Programming Guide displays information about TV programs and enables you to access features such as Parental Control or Pay-Per-View. Interactive program guides may vary with each service provider.

Video Output Format Option

LN4000 set-top box allows you to quickly change the video output format used by the Composite Video, Component Video (YPbPr) and HDMI outputs. The LN4000 set-top box is capable of providing the following video formats on the YPbPr and HDMI video outputs:

- High Definition 1080i (1920 x 1080 pixels)
- High Definition 720p (1280 x 720 pixels)
- Enhanced Definition 480p (720 x 480 pixels)
- Standard Definition 480i (720 x 480 pixels)
- The LN4000 set-top box is also capable of passing through High-Definition 1080p 24/30 (1920 x 1080 pixels) source content over the HDMI video output.

LN4000 allows you to select a video output format that is compatible with a connected display device. This option provides an easy method for selecting an output format that is compatible with your television.

3. CONNECTING YOUR LN4000 SET TOP BOX TO YOUR HOME

Instructions and diagrams are included for the following connections:

- High-Definition Television (HDTV)
- Standard-Definition TV (SDTV)
- WiFi Router
- Before you move or change components on your entertainment system, review the following:
- Disconnect power from your equipment before connecting or changing connections. For information on connecting to an HDTV, see the Video Connection Options page.

HDMI provide video and audio, so no separate audio connections are required if you plan to use your TV's speakers as the primary audio source.

Component video (YPbPr) — HDTV and SDTV

The YPbPr connectors on your LN4000 set-top box provide HDTV and SDTV component video. Note: Component video does not provide audio. A separate audio connection must be made.

Composite video — SDTV

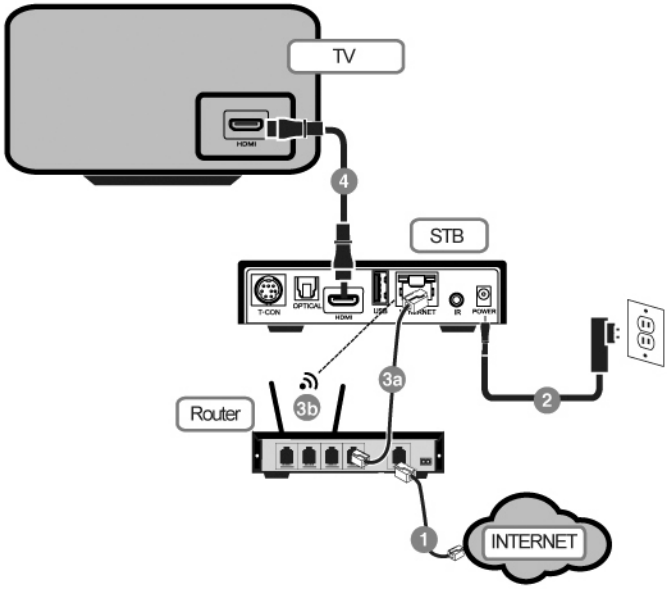
If a Component input is not available on your TV, use the composite video (video) connection. Note: Composite video does not provide audio. A separate audio connection must be made.

HDMI

If your TV has an HDMI input, this is for both audio and video if you are using the TV speakers. Connect the provided HDMI cable to the TV and to the HDMI connector on your LN4000 set-top box.

Connecting LN4000 with HDMI connector

Please see the setup diagram below:



Please follow the instructions below:

1. Make sure you're connected to the Internet without any problem (either with a router or a modem).

2. Plug in the power adapter of the LN4000 set-top box to the nearby power outlet.

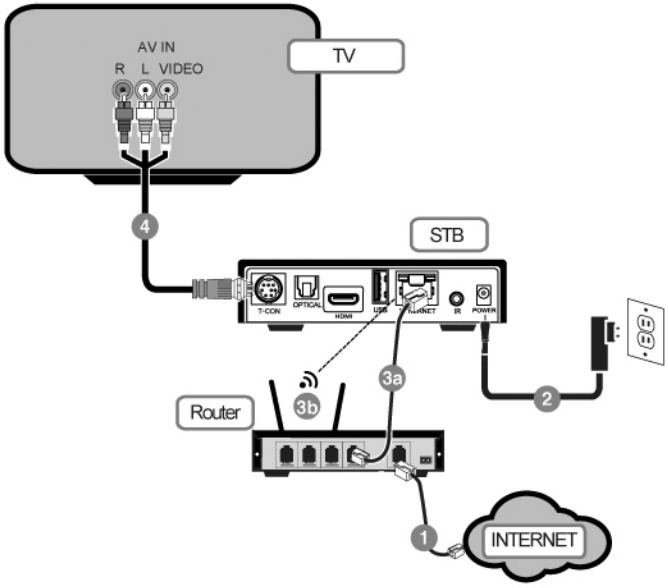
3a. Connect the network cable from the set-top box to the router.

3b. Alternatively you can also connect the set-top box wirelessly to your wireless router. This option is only available if your LN4000 set-top box has a wireless module in it and you have a working wireless router. You can setup the wireless connection later in the Settings page.

4. Connect the HDMI cable with the small connector head to the set-top box while the big connector head to your TV.

Connecting LN4000 with Composite video connector

Please see the setup diagram below:



Please follow the instructions below:

1. Make sure you're connected to the Internet without any problem (either with a router or a modem).

2. Plug in the power adapter of the LN4000 set-top box to the nearby power outlet.

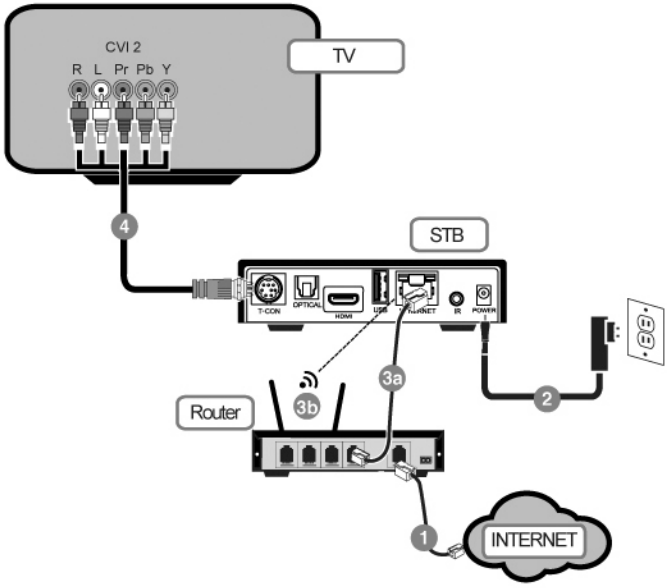
3a. Connect the network cable from the set-top box to the router.

3b. Alternatively you can also connect the set-top box wirelessly to your wireless router. This option is only available if your LN4000 set-top box has a wireless module in it and you have a working wireless router. You can setup the wireless connection later in the Settings page.

4. Connect the HDMI cable with the small connector head to the set-top box while the big connector head to your TV.

Connecting LN4000 with Component video connector

Please see the setup diagram below:



Please follow the instructions below:

1. Make sure you're connected to the Internet without any problem (either with a router or a modem).

2. Plug in the power adapter of the LN4000 set-top box to the nearby power outlet.

3a. Connect the network cable from the set-top box to the router.

3b. Alternatively you can also connect the set-top box wirelessly to your wireless router. This option is only available if your LN4000 set-top box has a wireless module in it and you have a working wireless router. You can setup the wireless connection later in the Settings page.

4. Connect the HDMI cable with the small connector head to the set-top box while the big connector head to your TV.

4. HOW TO MANUALLYCONFIGURE THE LN4000 SET-TOP BOX

- On the Main Menu page, use the remote control buttons to navigate and select Settings tab.

- Press Enter on the remote control to enter the Settings page.

- On the Settings page, use the remote control buttons to navigate up and down selection. Select General tab and press right arrow button to enter the page. At any point of the operation if you wish to go back to the left side menu selection, you can either press the left arrow button or the Back button on the remote control.

- On the Language tab, press right arrow button to go to the system language page.

- There are 3 different languages supported by LN4000: English, Russian, and German. Use the remote control to navigate up and down selecting your desired language. Once you have made a selection, press Enter on the remote control. It will automatically change the system language to the language of your selection.

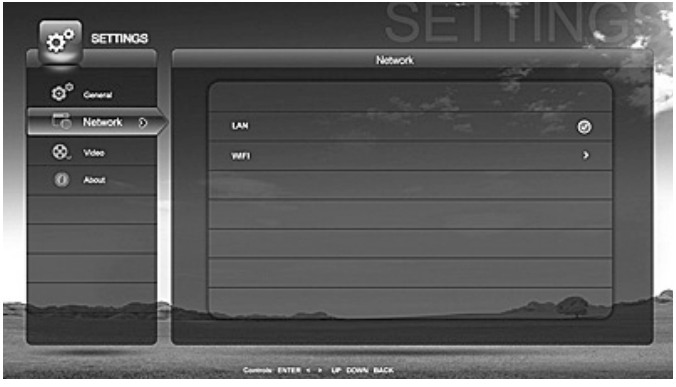
- On the Settings page, use the remote control buttons to navigate to Location tab, and press right arrow button to enter.

- On the Location page, select your location and press Enter. LN4000 will then set itself to the location of your selection.

- On the Settings page, use the remote control buttons to navigate to Skins tab, and press right arrow button on the remote control to select it.

- There are 5 different skins you can choose from. Use the remote control buttons to navigate up and down to select your desired skin for your LN4000.

- Once you have made your selection, press Enter on the remote control to change the system skin to the one that you choose.



- On the Settings page, use the remote control buttons to navigate up and down to select Network tab, and press right arrow button on the remote control.

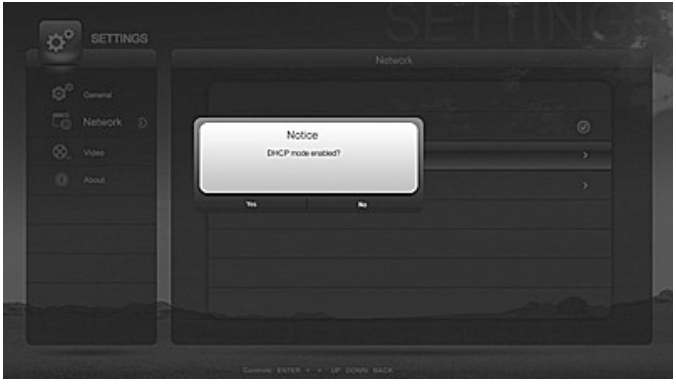
- If you want to connect the LN4000 to your home network by means of a network cable, then select LAN (Local Area Network) tab and press Enter.

- Select Static tab and press right arrow button only if you have the necessary information about your network and want to manually configure the network connection of LN4000 into your home network.

- Press any numeric button on the remote control, and it will bring up the soft keyboard onto the screen. If you want to cancel at this point, press the Back button on the remote control to go back. Once you have entered all the necessary information, press Enter on the soft keyboard or select OK and press Enter on the remote control to finish setting the Static IP address.

- On the Network settings page, use the navigation buttons on the remote control to move up and down to select between tabs.

- Select DHCP if you don't want or need to manually configure the IP address for your LN4000. Press right arrow button to select it.

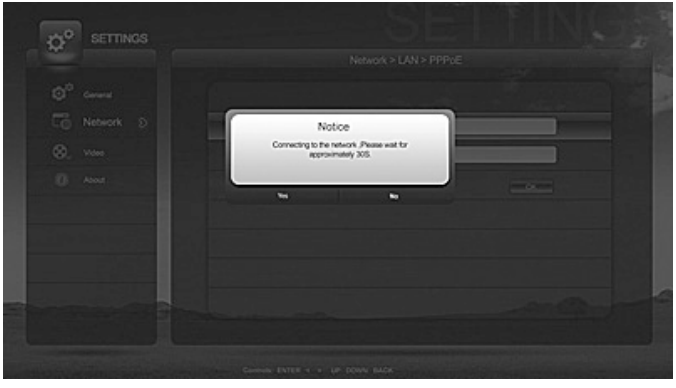


- You will then be asked to confirm if you want the DHCP mode to be enabled or not.

- Once you have selected yes, and press Enter on the remote control, then the DHCP mode is enabled from then on.

- On the Network settings page, use the navigation buttons on the remote control to move up and down to select between tabs. Select PPPoE and press right arrow button on the remote control to enter.

- Press any numeric button on the remote control to bring up the soft keyboard. Enter all the necessary information and press Enter on the soft keyboard or select OK and press Enter on the remote control when you finish.



- Please wait while LN4000 is trying to establish the network connection for you.

- When it has successfully established the connection you will see the check mark next to the PPPoE tab.

- If you want to connect LN4000 to your home network by means of wireless connection, then on the Network page select WIFI and press the right arrow button on the remote control to enter the WIFI page.

- LN4000 then will display a list of all the available wireless connections nearby that it can find for you to select.

- Once you have made your selection, and press Enter on the remote control you will then be asked for the password. Here you can press any numeric button on the remote control to bring up the soft keyboard for ease of entering information into the required field. Once you have finished entering, press Enter on the soft keyboard.

- When the wireless connection has been fully established, you will see a check mark on the wireless connection of your own choosing.

- The next time you enter the Network page you will see that you're connected to your home network by WiFi when you see the check mark next to the WIFI tab.

- On the Settings page, use the navigation buttons on the remote control to select Video, and press right arrow button to enter the display mode page.

- On the Display Mode tab, press right arrow button to select it.

- Select the display mode that you want by pressing Enter on the remote control. Please base your selection on what your television unit can support. Once you have made the right display mode selection, you will see a check mark next to the display mode of your selection.

- On the Settings page, use the navigation buttons on the remote control and select About tab and press right arrow button to know more information about your LN4000. You might need to provide this information to your service provider or for some customer assistance.

5. TROUBLESHOOTING

Before calling your service provider, review this troubleshooting guide. This information is to help you quickly solve a problem. If your problem still exists, contact your service provider.

Problem	Possible Solution
The LN4000 set-top box will not power on	The LN4000 set-top box may have received a software update and may not power on while the new software is being installed. Try again in a few minutes. ● Verify that the AC power cord of the external power supply is connected to the LN4000 set-top box and an AC outlet. Unplug the LN4000 set-top box from the AC outlet, plug it back in. ● If the LN4000 set-top box is connected to a switched outlet on another unit, verify that that unit is powered on. Unplug the power cord from the LN4000 set-top box AC outlet, plug it back it in. It is recommended to use an unswitched outlet, if possible.

The remote control does not work	Verify that there are batteries in the remote control, and that they've been inserted with the correct polarities. Verify that there are no obstructions between the remote control and the LN4000 set-top box. Also check to see if there's any plastic cover on the front panel of LN4000. If so, please remove it as it might affect the remote control reception. Aim the remote control directly at the LN4000 set-top box front panel, not the TV or VCR. The angle between the remote control and the LN4000 set-top box may be too large. Stand in front of the LN4000 set-top box and not too far to either side. ● Press and release operation keys one at a time, firmly and deliberately. ● Check the batteries in the remote control. Install new batteries if needed.
There is no audio when viewing channels	Verify that the mute button on the LN4000 set-top box or the remote control has not been pressed. Press mute on the remote control to restore sound. ● If the LN4000 set-top box audio output is connected to the TV, verify that the mute button on the TV has not been pressed. ● If the LN4000 set-top box audio output is connected to a home theater receiver, verify that the receiver is set to the appropriate input source and the mute button on the receiver has not been pressed. ● Verify that you have the correct cables for the audio connections. ● Verify that the audio cables are firmly connected between the LN4000 set-top box and the audio play back device (TV, receiver, etc.).

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